

Amendments to the Specification:

Please replace the paragraph beginning on page 2, line 11, with the following rewritten paragraph:

In one embodiment of the invention, the apparatus for demineralizing osteoinductive bone comprises a container for holding demineralization solution and the osteoinductive bone; a vessel cap covering the container, the vessel cap containing a first port, and a second port for introducing the osteoinductive bone into the container; a filter tube assembly disposed within the first port for transporting the demineralization solution into and out of the container, the filter tube assembly being configured to exclude particles larger than a prescribed size; a pump for removing the demineralization solution from the container; and a first tube connecting the first port to the pump. The filter tube assembly preferably contains a plurality of openings along a predetermined portion thereof. Further, the filter tube assembly preferably is configured to exclude particles larger than $300\mu\text{m}$, more preferably is configured to exclude particles larger than $225\mu\text{m}$, and most preferably is configured to exclude particles larger than $125\mu\text{m}$.

Please replace the paragraph beginning on page 5, line 10 with the following rewritten paragraph:

Bone. By the term "bone" is intended, for the purposes of the invention, any bone as one having ordinary skill in the art would envision. For example, the bone includes autograft bone, allograft bone and xenograft bone. Moreover, such bone includes any bone from any source, including, for example, human bone and animal bone. The bone may be from a living donor or a cadaveric donor. The bone may include cortical bone and/or cancellous bone and/or cortical cancellous bone and may be present in any form including, for example, ground bone, particulate bone (i.e. dental bone), bone chips, bone strips, bone cubes, bone fibers, and essentially intact bone. The bone may be in any size. For example, the particulate bone can be in any particle size range, such as, for example, from about $120\mu\text{m}$ to about $860\mu\text{m}$.

Please replace the paragraph beginning on page 9, line 3 with the following rewritten paragraph:

Filter Mesh. By the term "filter mesh" is intended for the purposes of the invention any mesh composed of a material stable in the presence of the demineralizing solution having a mesh size sufficiently small so as to exclude bone particles. One skilled in the art is capable of selecting a suitable filter mesh in accordance with the present invention. Suitable filter mesh includes polyester monofilament having a mesh size of from $100\mu\text{m}$ to about $300\mu\text{m}$, preferably from about $100\mu\text{m}$ to about $225\mu\text{m}$, and most preferably about $125\mu\text{m}$. Such filter mesh includes Pes125, (Industrial Fabrics Corp., Minneapolis, Minn.), which is a polyester monofilament mesh having a mesh size of $125\mu\text{m}$.

Please replace the paragraph beginning on page 14, line 16, with the following rewritten paragraph:

The filter mesh **8** may be composed of any material stable in the presence of the demineralizing solution, such as polyester or Teflon, or an equivalent material. The filter mesh may be any size suitable to exclude bone particles. In a preferred embodiment, the mesh size is about $125\mu\text{m}$.